

Book Review

LOVELAND, R. P. 1970. Photomicrography. A Comprehensive Treatise, Vol. I & II. John Wiley & Sons, Inc., New York. Vol. I., vi + 1-526 + xii, Vol. II, vi + 527-1039 + xii. Cloth bound. Can. \$34.50.

Loveland, a former research associate of the Kodak Research Laboratories, has produced a book that is indeed a comprehensive account of photomicrography. He deals with all the major aspects of the subject without neglecting the more recent developments in this field.

In Volume I he gives a general consideration of the compound microscope, photomicrography, the optics of illuminating lamps, the quality of illumination, image contrasts and finally the eyepiece and roll-film cameras. This is followed by the appendices where depth of field, focal length of lenses and illumination for photomicrography are considered further; by a list of equations used in the text; and by the index which includes the subjects in Volume II. Loveland believes illumination to be very important and he pursues this subject further in Volume II where he considers special methods of illumination, flash photomicrography and the photographic spectrum. Consideration is then given to the selection of photographic materials, the determination of exposure, and processing and printing. He also deals with the advantages and problems of color photomicrography, with fluorescence micrography and cinemicrography. This is followed by appendices where he deals with exposure formulas, special immersion fluids and an illuminator for far-ultraviolet photomicrography, the equations used in the text, and an index as in Volume I.

In the foreword, Loveland indicates that the book has been written not only for the professional but also for the "neophyte" and he never loses sight of this. Ample warnings of the difficulties and disadvantages of various techniques are given and in some cases neophytes are warned off certain techniques. Each chapter is begun with a general consideration of the topic and then moves rapidly into the theoretical aspects. Loveland never neglects the practical problems and he always gives a good account of the various instruments available from the major manufacturers. He has obviously had much experience for when there is not a commercially manufactured piece of equipment to solve a problem, he gives photographs or line diagrams of the equipment he had built.

Loveland's style of writing is good; even in the more technical portions of the text it is a pleasure to read. The book's usefulness as a reference text is much enhanced by the printing of important sections of the text in italics or bold face type. These two volumes will be a very useful teaching aid for photomicrography and should be in every laboratory where photomicrography is practised.

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